Site 7 Salisbury Ballfield

Overview: The Ballfield potential restoration site is located on the north side of Route 1A (Beach Road) approximately 0.3 mi west of Salisbury Beach. The potential restoration site is contained on a municipally–owned parcel which currently includes two ballfields and a small parking area abutting Beach Road. The property includes approximately 3 ac of former salt marsh filled after 1952 based on a review of historical USGS mapping (Newburyport East, MA-NH Quadrangle USGS 7.5 Minute Series). The Town recently completed a new soccer field north of the older baseball field. Conversations with the Director or Public Works indicated that the remaining fill area of approximately 20,000 sq ft would be available for salt marsh restoration. This portion of the potential restoration site is not forested; instead it is dominated by vegetation typically found in coastal dune, maritime grassland and maritime shrubland communities. Typical borings taken from the potential restoration site consisted of 2.5 to 3 ft of light grey to dark brown medium-fine sand over the original peat surface. A comparison of the elevation of the buried marsh horizon with the adjacent marsh suggests the former marsh plain is generally 0.5 to 1 ft lower due to the compression of the organic soils. The ditches adjacent to the filled wetlands are connected to Dead Creek which extends in a northerly direction to the Blackwater River and ultimately Hampton-Seabrook Harbor.

Structure conditions: There are no structures associated with this potential restoration site.

Ecological Integrity: The potential restoration site consists of 3 to 4 ft of light grey to dark brown medium-fine sand fill over the original salt marsh plain. The area available for restoration is dominated by vegetation typically found in coastal dune, maritime grassland and maritime shrubland communities. There are narrow stands of *Phragmites* fringing the upland fill around most of the area which are expanding into the surrounding marsh. One nearby population occupies a slightly elevated portion of a creek bank just east of the filled wetlands. With the exception of the encroaching stands of *Phragmites*, the adjacent salt marsh exhibits a high degree of ecological integrity with diverse habitat types including large salt pannes. The limits of the municipally owned parcel include a portion of the existing marsh to the north and east. The western edge of the parcel is connected to lands held by MassWildlife. The area is contained within BioMap Core Habitat and is mapped as Priority Habitat for State-Protected Rare Species and Estimated Habitat for Rare Wildlife. Land uses along Beach Road are high density residential and recreational land. Dead Creek is mapped as suitable habitat for soft- shelled clam.

There were no tide data collected for this potential restoration site. Existing ditches adjacent to the filled wetlands are generally well-maintained and if necessary could be extended into the work area. Overall, the existing impairments are considered severe as a filled wetland. However, the potential restoration site is providing some maritime upland habitat. Removal of the fill material to an elevation near or slightly below the adjacent marsh will restore salt marsh habitat and lost flood storage volume. The restoration effort should include the construction of perimeter ditches within and adjacent to the fill removal area in order to minimize the further encroachment of *Phragmites* onto the marsh plain. The restoration will result in the conversion of man-made coastal dune or bank. Although the upland area is currently relatively free of invasive vegetation, the adjacent stands of *Phragmites* will likely expand into this area and compromise the floristic integrity of this coastal habitat. No impacts to abutting developed lands are anticipated. Efforts should be taken to maintain a visual and vegetative buffer between the restoration area and the proposed soccer field.

Socioeconomic: Recreational values of the potential restoration site are enhanced by the excellent public access and wildlife viewing opportunities provided by the adjacent recreational lands, as

well as available on-site parking. The municipal ownership status, good access, and level of use by children greatly enhance educational opportunities. However, there is no known ongoing research or nearby schools. The potential restoration site's Uniqueness/Heritage value is enhanced by its status as a Priority Habitat for State-Protected Rare Species and Estimated Habitat for Rare Wildlife. The potential restoration site does not include any known cultural resource elements or urban setting values.

Construction Logistics/Feasibility: The restoration potential for this site is enhanced by the limited size and scope of the restoration effort, excellent construction access and staging areas, lack of negative impacts to low lying abutters, and the lack of above or below ground utilities. Construction costs, based on the removal of approximately 2,500 cubic yds of fill, are estimated to be $75,000. The restoration opportunity also has a high level of local support, and may be considered as mitigation for other municipal projects (L. Pearson, Salisbury Planning Agent, pers. comm.).

Restoration Potential: The potential restoration site is considered to have moderate restoration potential based on the presence of several important socioeconomic factors including the high recreational and educational value, public land status, and the extent of the existing impairments. In addition to removing historic fill from the salt marsh, the project can control further encroachment of *Phragmites* onto the marsh plain with perimeter ditching within and adjacent to the filled wetlands. The potential is limited solely by the relatively high cost per acre. Costs could be substantially reduced if the effort were tied to other municipal project requiring mitigation. Key steps toward implementation involve further coordination with the Town to examine the possibility of linking the construction efforts.

Site # 007 | Site Features | Scale: 1:1,700

Photo 1 - Western Edge of Fill Viewing South

Photo 2 - Restoration Site Viewing East

Photo 3 - Eastern Portion of Restoration Area Viewing North

Photo 4 - Recent Clearing for Soccer Field

Great Marsh Coastal Wetlands Restoration Planning
Rapid Field Assessment

Site # 7
Salisbury Ballfield

Site Information

Site ID: 7
Site Name: Salisbury Ballfield
Municipality: Salisbury
Location: North side of Route 1A, approximatley 0.3 mi west of Salisbury Beach
Adjacent Waterbody: Blackwater River

Affected Area (Acres)

Mudflat/Open Water:	0	Total Area:	0.5
Salt Marsh:	0		
Other Wetland:	0	*Other Description:*	
Other:	0.5	Fill	

Impairment(s)

Tidal Restriction	☐	Fill	☑
Obstructed Ditche(s)	☐	Invasive Species	☑
Impoundment	☐	Pollution / Siltation	☐

Severity of Impairments: Severe

Project Type

Roadway Culvert(s)	☐	Obstructed Ditches	☐
Bridge	☐	Fill	☑
Berm	☐	Other	

Evidence of Restriction

Gauge Data	☐	Impounded Flow	☐
Downstream Scour Pool	☐	Obstructed Flow	☐
Upstream Scour Pool	☐	Invasive Species	☐
Bank Erosion	☐	Ponded Conditions	☐
Slumping	☐	Subsidence	☐

Structure / Channel:

Overall Condition:
Life Expectancy (Years):
Road Condition:
Structure Type:
Structure Age (Years)
Structure 1 Width (Feet):
Structure 1 Length (Feet):
Structure 2 Width (Feet):
Structure 2 Length (Feet):
Skew (Degrees):
Cover (Feet):
Scour Protectection: ☐
Adequately Aligned: ☐
Headwall Type:
Headwalll Condition:

Ecological Integrity / Habitat Value

Surrounding Land Use %

Commercial / Industrial	0
Residential	40
Agricultural	0
Undeveloped	60

Severity of Impairment(s): Severe
Invasive Plant Cover: Medium
Extent of Wooded Buffer: Poor
Habitat Connectivity: Fair

NHESP Estimated Habitats of Rare Wildlife: ☑
NHESP Priority Habitats of Rare Species: ☑
NHESP BioMap Core Habitat: ☑
NHESP BioMap Supporting Natural Landscape: ☐
ACEC: ☐
Anadromous Fish: ☐
Shellfishing Suitability: ☑
Barriers to Fish Passage

Great Marsh Coastal Wetlands Restoration Planning
Rapid Field Assessment

Site # 7
Salisbury Ballfield

Construction Logistics / Feasibility

Traffic Volume	None
Detour Potential	☐
Site Access	Good
Staging Areas	☑
Fill Material Concern	Minimal
Low Lying Property Concerns	None
Overhead Utility Constraint	None

Underground Utilities

Water	☐	*Telephone*	☐
Gas	☐	*Sewer*	☐
Electric	☐	*Drainage*	☐

Permitting Complexity	Medium
Local Support	Yes
Feasibility Cost	10,000
Design Cost	15,000
Permitting Cost	10,000
Construction Cost	75,000
Total Cost	110,000
Relative Cost/Acre	220,000

Socioeconomic

Recreation

Public Access:	☑
Watercraft / Portage:	☐
Wildlife Viewing:	☑

Education

Schools Nearby:	☐
Ongoing Research:	☐
Education / Outreach Potential:	High
Saftey Concerns (Access):	Low

Uniqueness / Heritage Value

Rare Species Habitat:	☑
ACEC:	☐
Cultural Resource Features	☐
Urban Viewscape Value:	None
Urban Habitat Value:	None

Tide Surveys

	Start:		*Finish:*
Dates of 1st Survey:		-	
Date of Highest Tide:			
Max Measured Tidal Dampening:			
Percent of Tidal Prism:			
Measured Delay:			

	Start:		*Finish:*
Dates of 2nd Survey:		-	
Date of Highest Tide:			
Max Measured Tidal Dampening:			
Percent of Tidal Prism:			
Measured Delay:			

Summary

Uniqueness / Heritage Value:	Medium	Ecological Integrity:	Medium
Recreational Value:	High	Logistics / Feasibility:	High
Educational Value:	High		

Restoration Potential: Moderate